ABSTRACT

A substrate processing method comprising steps for forming a copper film on a surface of a substrate. These steps includes the step of filling a first metal in the trenches so as to form a plated film of the first metal on an entire surface of the substrate by electroplating, wherein the electromagnetic field is adjusted by the virtual anode so that differences of thickness of the plated film between the central portion and the peripheral portion of the substrate being minimized, and polishing and removing the plated film by pressing the substrate to the polishing surface, wherein the pressures pressing the substrate to the polishing surface at a central portion and a peripheral portion are adjusted.